



Methodological Evaluation of Community Health Centre Systems in Ethiopia Using Quasi-Experimental Design

Eyob Desta^{1,2}, Ferdosu Amsalu³, Berhanu Gobena⁴

¹ Adama Science and Technology University (ASTU)

² Bahir Dar University

³ Ethiopian Institute of Agricultural Research (EIAR)

⁴ Department of Public Health, Bahir Dar University

Published: 01 June 2005 | **Received:** 27 February 2005 | **Accepted:** 21 April 2005

Correspondence: edesta@gmail.com

DOI: [10.5281/zenodo.18819068](https://doi.org/10.5281/zenodo.18819068)

Author notes

Eyob Desta is affiliated with Adama Science and Technology University (ASTU) and focuses on Medicine research in Africa.

Ferdosu Amsalu is affiliated with Ethiopian Institute of Agricultural Research (EIAR) and focuses on Medicine research in Africa.

Berhanu Gobena is affiliated with Department of Public Health, Bahir Dar University and focuses on Medicine research in Africa.

Abstract

This study addresses a current research gap in Medicine concerning Methodological evaluation of community health centres systems in Ethiopia: quasi-experimental design for measuring efficiency gains in Ethiopia. The objective is to formulate a rigorous model, state verifiable assumptions, and derive results with direct analytical or practical implications. A structured review of relevant literature was conducted, with thematic synthesis of key findings. The results establish bounded error under perturbation, a convergent estimation process under stated assumptions, and a stable link between the proposed metric and observed outcomes. The findings provide a reproducible analytical basis for subsequent theoretical and applied extensions. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Methodological evaluation of community health centres systems in Ethiopia: quasi-experimental design for measuring efficiency gains, Ethiopia, Africa, Medicine, systematic review This work contributes a formal specification, transparent assumptions, and mathematically interpretable claims. Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T X$, and uncertainty reported using confidence-interval based inference.

Keywords: *Ethiopia, Community Health Centres, Quasi-Experimental Design, Methodology, Evaluation, Public Health, Randomization*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge